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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/814,457

03/31/2004

Dennis J. Peterlin

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10/16/2006

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EXAMINER

LANDRUM, EDWARD F

ART UNIT

PAPER NUMBER

3724

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/814,457	Applicant(s) PETERLIN, DENNIS J.	
	Examiner Edward F. Landrum	Art Unit 3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-21, 23-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 and 29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12, 14-21, 23-25, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/10/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12, 14-21, and 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Altena et al (U.S Patent No. 6,327,784), hereinafter Altena, in view of Hastings (U.S Patent No. 3,654,701).

Altena teaches (see Figure 2E) a steel razor blade (1) having two generally parallel outer surfaces with a region defined therebetween the two outer surfaces. A coating layer (11), made of silicon dioxide (Col. 8, lines 10-24), is applied to one outer surface and has an edge of sufficient sharpness to cut hair. The cutting edge (33) made by the coating layer (11) is located outside of the region formed by the outer surfaces. The cutting edge has a blade tip radius, where the blade tip defines the sharpness of the blade.

Altena teaches all of the elements of the current invention as stated above except the cutting edge having coplanar cutting edge patterns that form a non-linear cutting edge. Altena further fails to teach the cutting edge patterns being uniform in size and shape; the cutting edge patterns being serrations; the distance between each cutting edge pattern

Hastings teaches (see Figures 4 and 5) a razor blade (4) with a non-linear, coplanar cutting edge. The cutting edge patterns are substantially uniform in shape and size and each scallop shaped serration in the cutting edge pattern defines first and second sides, a trough, and a crest. The cutting edge pattern includes between 100 and 200 serrations per inch. If there are 200 serrations per inch that means each serration covers about .005 inches, which is about 127 microns. The amplitude of each serration is between .0005 inches and .005 inches, which is between about 12.7 and 127 microns.

It would have been obvious to have modified Altena to incorporate the teachings of Hastings to provide a serrated cutting edge pattern on the coating layer to increase the amount of cutting surface per unit of length on the blade as well as achieve more closeness and comfort than a straight razor.

3. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Altena in view of Goel et al (U.S Patent No. 5,795,648), hereinafter Goel.

The modified device of Altena teaches all of the elements of the current invention as stated above except the blade tip having a radius between 300 to 700 angstroms.

Goel teaches a tip radius for the coated blade between 75 and 1000 angstroms (Col. 3, lines 39-41).

It would have been obvious to have modified the modified device of Altena to incorporate the teachings of Goel to provide a small radius blade tip to make a very sharp cutting blade. Making a very sharp cutting blade would reduce the amount of

strokes a user needed to shave the same area thereby increasing the comfort of the user and increasing the life of the razor by reducing the number of strokes taken during a shaving process.

4. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Altena in view of Balke (U.S Patent No. 6,382,068).

The modified device of Altena teaches all of the elements of the current invention as stated above except the cutting edge pattern containing a plurality of micro-patterns.

Balke teaches (Col. 1, lines 5-8) providing a micro-pattern of finer cutting teeth on the cutting teeth of a cutting edge of a blade.

It would have been obvious to have modified the modified device of Altena to incorporate the teachings of Balke to provide finer teeth on the cutting teeth of the blade for the purpose of providing a larger cutting surface area which will provide a more smooth, clean, and uniform cut across the entire blade than a blade with less surface area.

5. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified device of Hastings in view of Trankiem (U.S Patent No. 5,101,565).

The modified device of Altena teaches all of the elements of the current invention as stated above except the cutting edge being single-faceted.

Trankiem teaches (Col. 1, lines 46-59) that it is old and well known to make a razor blade, which can be coated, single faceted.

It would have been obvious to have modified the modified device of Altena to incorporate the teachings of Trankiem to make the cutting edge single-faceted for the purpose of decreasing production time.

Response to Arguments

6. Applicant's arguments with respect to claims 12, 14-22, 23-25, 27, and 28 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's arguments on claim 27, many razor blades cut parallel to the cutting edge much like a saw blade. Furthermore, cutting edges and increased cutting efficiency.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Boland et al (U.S Patent No. 5,129,289), Sastri (U.S Patent No. 3,811,189), and Clipstone et al (U.S Patent No. 6,684,513) teach blades with coatings. Henderson (U.S Patent No. 4,534,827) teaches a radius for a cutting edge. Futterer et al (U.S Patent No. 3,169,317) teaches specific dimensions for a non-linear cutting edge. McDaniel (U.S Pattern No. 5,123,845) teaches a non-linear cutting edge with a micro-pattern.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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EFL

10/2/2006

A handwritten signature in black ink, appearing to be 'EFL', written over the date '10/2/2006'.A handwritten signature in black ink, appearing to be 'K. E. Peterson', written above the printed name.

KENNETH E. PETERSON
PRIMARY EXAMINER